AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (Currently Amended) A method for transferring subscriber location information in a network communication system, comprising:

determining, by a network access device, the subscriber location information when a subscriber accesses the network, wherein the subscriber location information comprises an identifier of the network access device, a slot number of the subscriber interface board, and a port number of a port of the subscriber interface board in the network access device;

converting, by the network access device, the subscriber location information into a code in an encoding format of a content of a field in a packet sent from the subscriber;

replacing, by the network access device, the content of the field in the packet with the subscriber location information code, and transferring the packet in the network communication system,

wherein said subscriber location information code comprises:

one or more indexes of broadband access device number, device frame number, slot number, and port number that are required to identify the subscriber location information;

an index of MAC address of the subscriber terminal;

an index of subscriber type of the subscriber terminalone or more indexes of MAC address and subscriber type of the subscriber terminal; and

one or more indexes of priority and protocol encapsulation mode that describe subscriber characteristics.

2. (Canceled)

3. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 1, wherein said step of converting the subscriber location information comprises:

converting, by the network access device, the subscriber location information into the code in the same encoding format as a MAC address carried in the packet sent from the subscriber.

4. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 3, wherein said step of replacing the content of the field in the packet with the subscriber location information code, and transferring the packet in the network communication system comprises:

replacing the MAC address carried in the packet sent from the subscriber with the subscriber location information code, and sending the packet to an access server in the network communication system.

5. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 4, wherein

said network access device is a broadband access device;

said access server is a Broadband Remote Access Server, BRAS, or a network device with BRAS function in the broadband network.

6. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 5, further comprising:

configuring a correspondence between the subscriber location information and the subscriber location information code in the broadband access device;

configuring a correspondence between the subscriber location information code and the subscriber location information in the broadband access server, or configuring a correspondence between the subscriber location information code and the subscriber location information in a Radius Server.

7. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 4, further comprising:

replacing a destination MAC address in a packet, from the network-side port of the network access device, addressed to the subscriber with the MAC address of the subscriber terminal; and then sending the packet to the subscriber.

8. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 3, wherein said step of converting the subscriber location information comprises:

encoding, by the network access device, the subscriber location information into a 48-bit subscriber location information code in the encoding format of the MAC address.

9. (Canceled)

10. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 8, wherein said 48-bit subscriber location information code comprises:

24 bits, content determined by network access device manufacturers; 5 bits, index of MAC address of the subscriber terminal; 7 bits, index of the network access device ID; 7 bits, index of the access port number; and 5 bits, index of slot number of the subscriber interface board where the subscriber accesses.

11. (Currently Amended) The method for transferring subscriber location information in a network communication system according to ~~claim 9~~ claim 1, wherein said subscriber location information encoding comprises:

mapping the subscriber location information to the subscriber location information code through direct mapping; or

converging the subscriber location information to an intermediate variable ID, and then mapping the intermediate variable ID to the subscriber location information code.

12. - 17. (Canceled)

18. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 1, wherein the subscriber location information further comprises a Media Access Control, MAC, address of a subscriber terminal.

19. (Previously Presented) The method for transferring subscriber location information in a network communication system according to claim 1, wherein the subscriber accesses the network via the port of the subscriber interface board.

20. (Currently Amended) A method for transferring subscriber location information in a network communication system, comprising:

determining, by a network access device, the subscriber location information when a subscriber accesses the network;

converting, by the network access device, the subscriber location information into a 48-bit subscriber location information code in an encoding format of a Media Access Control, MAC, address carried in a packet sent by the subscriber;

replacing, by the network access device, the MAC address in the message with the subscriber location information code, and transferring the message in the network communication system,

wherein said 48-bit subscriber location information code comprises: 5 bits, index of the MAC address of a subscriber terminal; 7 bits, index of an identifier of the network access device; 7 bits, index of a port number of a port through which the subscriber accesses the network; and 5 bits, index of a slot number of a subscriber interface board having the port, and

wherein converting the subscriber location information comprises:

converging the subscriber location information to an intermediate variable ID, and then mapping the intermediate variable ID to the subscriber location information code.

21. (Currently Amended) A network access device, comprising:

means for determining a subscriber location information when a subscriber accesses the network;

means for converting the subscriber location information into a code in an encoding format of a content of a field in a packet from the subscriber;

means for replacing the content of the field in the message with the subscriber location information code, and transferring the message in the network communication system;

wherein the subscriber location information comprises an identifier of the network access device, a port number of a port of a subscriber interface board in the network access device, a slot number of the subscriber interface board, and a Media Access Control, MAC, address of a subscriber terminal; wherein the subscriber accesses the network via the port of the subscriber interface board,

wherein said subscriber location information code comprises:

one or more indexes of broadband access device number, device frame number, slot number, and port number that are required to identify the subscriber location information;

~~one or more indexes of MAC address and subscriber type of the subscriber terminal~~an index of MAC address of the subscriber terminal;

an index of subscriber type of the subscriber terminal; and

one or more indexes of priority and protocol encapsulation mode that describe subscriber characteristics.